

EC Fans – Growing in Popularity



Energy conservation is of ever increasing importance in today's world. Replacing existing equipment with advanced energy-efficient motors results in a substantial reduction in energy usage and cost. For today's demanding applications that require increased electrical efficiency, EC (electronically commutated) fans represent a significant advancement in power savings technology, providing cooling and air flow solutions.

What are EC Fans?

EC fans are powered by brushless DC motors, which are also known as EC motors. Due to its inherent design that uses permanent magnets to generate a secondary magnetic field rather than copper windings, DC motors can be up to 30% more efficient than AC motors. Brushless DC motors are typically 85–90% efficient while brushed DC motors are generally in the range of 75–80% efficient; the brushed motors lose efficiency from brush friction.

Why Use EC Fans?

EC fans can be used in most applications where AC fans are used. Compared to AC fans, EC fans are the same size while offering the same or higher airflow capacity all with significantly less power.

High efficiency EC fans have gained popularity and are being used in applications where there is a need to meet energy efficiency regulations, yet they offer other advantages as well. EC motors avoid the sparking and potential electromagnetic interference of brushed motors. They have longer service life due to the smaller heat losses and lower operating temperatures.

EC fans are ideal for use in major home appliances such as refrigerators, freezers, ovens, range hoods etc. commercial refrigeration and HVAC (heating, ventilation and air conditioning).

SUNON Eco EC and Maglev EC, the CF series from 6025mm to 12038mm are available for your best choice.